

REMARKS

Claims 1-20 are pending in this application.

Applicants have amended independent claims 1 and 16. These changes do not introduce any new matter.

Applicants respectfully request reconsideration of the rejection of claims 1-20 under 35 U.S.C. § 102(e) as being anticipated by *Nickel et al.* (U.S. Patent No. US 6,927,995 B2). As explained below, the *Nickel et al.* reference does not disclose each and every feature of independent claims 1, 11, and 16, as presented herein.

Applicants have amended independent claim 1 to specify that the magnetic device has first and second ends, that one of the pair of writing magnets is disposed opposite the first end of the magnetic device and is separated from the first end of the magnetic device by an insulator, and that another of the pair of writing magnets is disposed opposite the second end of the magnetic device and is separated from the second end of the magnetic device by an insulator.

Applicants respectfully traverse the Examiner's characterization of the *Nickel et al.* reference relative to the subject matter defined in independent claim 1. In support of the anticipation rejection, the Examiner alleges that memory cell 10 constitutes a magnetic device as specified in claim 1. As claim 1 defines a memory cell, Applicants respectfully submit that memory cell 10 cannot reasonably be considered to constitute a magnetic device, which forms part of a memory cell, as specified in the claim. Nevertheless, Applicants have amended claim 1 to define structural features not shown in the *Nickel et al.* reference. In particular, Applicants have clarified the relative positioning of the magnetic device and the pair of writing magnets. The *Nickel et al.* reference does not disclose a magnetic device and a pair of writing magnets as specified in amended claim 1.

Applicants have amended independent claim 16 along the lines set forth above regarding claim 1. Applicants submit that the *Nickel et al.* reference does not disclose a plurality of magnetic devices and a plurality of writing magnets as specified in amended claim 16 for at least the same reasons set forth above regarding claim 1.

Regarding independent method claim 11, the *Nickel et al.* reference does not disclose at least the method operation of “generating a field strength using the writing magnets, the field strength capable of switching a magnetic alignment of the magnetic device.” At column 3, lines 59-67, the *Nickel et al.* reference states: “Write currents are supplied to vertical traces 28 and horizontal traces 30 to create magnetic fields. The magnetic fields are used to write to magneto-resistive devices 12 and 14. That is, the magnetic fields are used to set the orientations of sense layer magnetization vectors M1 and M3. Magnitudes of the write currents determine the magnetic field strength, and direction of the write currents determine the direction in which a sense layer magnetization vector is switched.” This description means that that the magneto-resistive devices are written to by the magnetic field. The magneto-resistive devices do not generate a magnetic field. As such, the *Nickel et al.* reference does not disclose the generating of a field strength using the writing magnets as specified in claim 11.

In view of the foregoing, independent claims 1, 11, and 16, as presented herein, are patentable under 35 U.S.C. § 102(e) over *Nickel et al.* Claims 2-10, each of which ultimately depends from claim 1, claims 12-15, each of which depends from claim 11, and claims 17-20, each of which ultimately depends from claim 16, are likewise patentable under 35 U.S.C. § 102(e) over *Nickel et al.* for at least the same reasons set forth regarding the applicable independent claim.

Applicants respectfully request reconsideration of the rejection of claims 1-20 under 35 U.S.C. § 102(e) as being anticipated by *Hosotani* (U.S. Patent No. US 6,829,162 B2). As

explained below, the *Hosotani* reference does not disclose each and every feature of independent claims 1, 11, and 16, as presented herein.

As noted above, Applicants have amended independent claim 1 to specify that the magnetic device has first and second ends, that one of the pair of writing magnets is disposed opposite the first end of the magnetic device and is separated from the first end of the magnetic device by an insulator, and that another of the pair of writing magnets is disposed opposite the second end of the magnetic device and is separated from the second end of the magnetic device by an insulator.

Applicants respectfully traverse the Examiner's characterization of the *Hosotani* reference relative to the subject matter defined in independent claim 1. In support of the anticipation rejection, the Examiner alleges that the separate magnetic tunneling junction (MTJ) elements 16 and 21 constitute a magnetic device as specified in claim 1. Applicants respectfully submit that MTJ elements 16 and 21 constitute separate elements in the device shown in the *Hosotani* reference and therefore cannot reasonably be considered to constitute a single magnetic device as specified in the claim. Nevertheless, Applicants have amended claim 1 to define structural features not shown in the *Hosotani* reference. In particular, as noted above, Applicants have clarified the relative positioning of the magnetic device and the pair of writing magnets. The *Hosotani* reference does not disclose a magnetic device and a pair of writing magnets as specified in amended claim 1.

As noted above, Applicants have amended independent claim 16 along the lines set forth above regarding claim 1. Applicants submit that the *Hosotani* reference does not disclose a plurality of magnetic devices and a plurality of writing magnets as specified in amended claim 16 for at least the same reasons set forth above regarding claim 1.

Regarding independent method claim 11, the *Hosotani* reference does not disclose at least the method operation of "generating a field strength using the writing magnets, the field

strength capable of switching a magnetic alignment of the magnetic device.” In support of the anticipation rejection, the Examiner relies on the description in the *Hosotani* reference at column 8, lines 54-67. Applicants review of the cited portion of the *Hosotani* reference did not uncover any reasonable basis for the Examiner’s conclusion that a field strength is generated using initial ferromagnetic layers 102, which the Examiner cites as constituting the “writing magnets” specified in the claimed subject matter. As such, Applicants respectfully submit that the *Hosotani* reference does not disclose the generating of a field strength using the writing magnets as specified in claim 11.

In view of the foregoing, independent claims 1, 11, and 16, as presented herein, are patentable under 35 U.S.C. § 102(e) over *Hosotani*. Claims 2-10, each of which ultimately depends from claim 1, claims 12-15, each of which depends from claim 11, and claims 17-20, each of which ultimately depends from claim 16, are likewise patentable under 35 U.S.C. § 102(e) over *Hosotani* for at least the same reasons set forth regarding the applicable independent claim.

In view of the foregoing, Applicants respectfully request reconsideration and reexamination of claims 1-20, as presented herein, and submit that these claims are in condition for allowance. Accordingly, a notice of allowance is respectfully requested. In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at **(408) 749-6902**. If any additional fees are due in

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connection with the filing of this paper, then the Commissioner is authorized to charge such fees to Deposit Account No. 50-0805 (Order No. MXICP024).

Respectfully submitted,
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